

Metadata for Jewel Cave National Monument, Field Plots Data Base for Vegetation Mapping

Identification_Information:

Citation:

Citation_Information:

Originator: U.S. Geological Survey Department of Interior

Publication_Date: 19980309

Title:

Jewel Cave National Monument, Field Plots Data Base for Vegetation Mapping

Geospatial_Data_Presentation_Form: Database

Series_Information:

Series_Name: USGS-NPS Vegetation Mapping Program

Issue_Identification: Jewel Cave National Monument

Publication_Information:

Publication_Place: Denver, CO

Publisher: USGS, Biological Resource Division, Center for Biological Informatics

Other_Citation_Details: Created by Bureau of Reclamation under contract to the USGS-BRD-CBI.

Online_Linkage: <http://biology.usgs.gov/npsveg/jeca/fielddata.html>

Description:

Abstract:

Vegetation field plots at Jewel Cave NM were visited, described, and documented in a digital database. The database consists of 2 parts - (1) Physical Descriptive Data, and (2) Species Listing.

Purpose:

Provide National Parks with the necessary tools to effectively manage their natural resources. Plot data is collected and analyzed to develop a classification (using the Standardized National Vegetation Classification System) and description of vegetation types in preparation for photointerpretation and mapping of the monument's vegetation types.

Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 199607

Ending_Date: 199608

Currentness_Reference: Ground Truthing

Status:

Progress: Complete

Maintenance_and_Update_Frequency: not applicable

Spatial_Domain:

Bounding_Coordinates:

West_Bounding_Coordinate: -103.87

East_Bounding_Coordinate: -103.75

North_Bounding_Coordinate: 43.77

South_Bounding_Coordinate: 43.62

Description_of_Geographic_Extent:

Jewel Cave National Monument and
about a 2 mile environs around Monument Boundaries - Black Hills,
South Dakota, USA

Keywords:

Theme:

Theme_Keyword_Thesaurus: None

USGS-NPS Vegetation Mapping Program
Jewel Cave National Monument

Theme_Keyword: National Park Service
Theme_Keyword: U.S. Geological Survey
Theme_Keyword: The Nature Conservancy
Theme_Keyword: Bureau of Reclamation
Theme_Keyword: Center for Biological Informatics
Theme_Keyword: land cover
Theme_Keyword: vegetation
Theme_Keyword: association

Place:

Place_Keyword_Thesaurus: None
Place_Keyword: Jewel Cave National Monument
Place_Keyword: Black Hills
Place_Keyword: South Dakota
Place_Keyword: USA

Taxonomy:

Keywords/Taxon:

Taxonomic_Keyword_Thesaurus: None
Taxonomic_Keywords: Plant Communities

Taxonomic_Classification:

Taxon_Rank_Name: Kingdom
Taxon_Rank_Value: Plantae

Access_Constraints: None

Use_Constraints:

Any person using the information presented here should fully understand the data collection and compilation procedures, as described in these metadata, before beginning analyses. The burden for determining fitness for use lies entirely with the user. For purposes of publication or dissemination, citations or credit should be given to the U.S. Geological Survey and the National Park Service.

Point_of_Contact:

Contact_Information:

Contact_Organization_Primary:

Contact_Organization: USGS Biological Resources Division, Center for Biological Informatics
Contact_Person: USGS-NPS Vegetation Mapping Program Coordinator

Contact_Address:

Address_Type: Physical Address
Address: USGS
Address: Biological Resources Division, CBI
Address: Building 810, Room 8000
City: Denver
State_or_Province: Colorado
Postal_Code: 80225-0046
Country: USA

Contact_Address:

Address_Type: Mailing Address
Address: USGS
Address: Biological Resources Division, CBI
Address: PO BOX 25046, DFC, MS302
City: Denver
State_or_Province: Colorado
Postal_Code: 80225-0046
Country: USA

Contact_Voice_Telephone: (303) 202-4220

Contact_Facsimile_Telephone: 303-202-4229

Contact_Facsimile_Telephone: 303-202-4219 (org)

Contact_Electronic_Mail_Address: gs-b-npsveg@usgs.gov

Browse_Graphic:

USGS-NPS Vegetation Mapping Program
Jewel Cave National Monument

Browse_Graphic_File_Name: <<http://biology.usgs.gov/npsveg/jeca/images/jecaplots.gif>>

Browse_Graphic_File_Description: Locations of vegetation plot samples; low resolution for web browsing.

Browse_Graphic_File_Type: GIF

Data_Set_Credit: BRD-USGS, U.S, BOR, TNC

Native_Data_Set_Environment: DB4

Data_Quality_Information:

Attribute_Accuracy:

Attribute_Accuracy_Report:

Descriptive plot data were collected for 29 sites whose vegetation represents a full spectrum of alliance types present within Jewel Cave National Monument and its immediate surroundings. Physical description - Attributes collected for each site include: a unique plot identification code, park name, quad name, UTM coordinates, UTM projection, plot survey date, surveyor's name, length, width, photo type, elevation, slope aspect, topographic position, landform, surface geology, Cowardin System category, hydrology, surface material description, soil texture, soil drainage, leaf phenology, leaf type, and physiognomy. Species - Individual species described at each 29 plots is listed, one line per species, with the information: Plot Identification code, Species Name, Species Cover (0=trace, 1=< 1%, 2=1-5%, 3=5-25%, 4=25-50%, 5=50-75%, 6=75-100%), and Plant Strata (T, S, H. v.s, and no entry).

Logical_Consistency_Report:

Entries for each of the listed attributes are in the form of consistent groupings of either textual or numerical descriptors.

Completeness_Report:

Descriptive entries for each of the 29 plots are complete for each of the applicable attributes listed in the database.

Positional_Accuracy:

Horizontal_Positional_Accuracy:

Horizontal_Positional_Accuracy_Report:

X,Y UTM coordinates representing each of the 29 plots were collected by P-code PLGR (Precise Lightweight GPS Receiver) receivers, with an accuracy ranging from +/- 10 m. to +/- 30 m. based on 60 second averaging at each point.

Vertical_Positional_Accuracy:

Vertical_Positional_Accuracy_Report: Not applicable

Lineage:

Methodology:

Methodology_Type: Field

Methodology_Identifier:

Methodology_Keyword_Thesaurus: None

Methodology_Keyword: releve

Methodology_Keyword: plot

Methodology_Keyword: sampling

Methodology_Description: Field sampling using releve plots

Source_Information:

Source_Citation:

Citation_Information:

Originator: National Biological Survey (Now USGS/Biological Resources Division)

Originator: and National Park Service

Publication_Date: 199411

Title:

Standardized National Vegetation Classification System; protocol document for the USGS-NPS Vegetation mapping Program (unpublished report)

USGS-NPS Vegetation Mapping Program
Jewel Cave National Monument

Geospatial_Data_Presentation_Form: report

Edition: Final Draft

Series_Information:

Series_Name: USGS-NPS Vegetation Mapping Program

Issue_Identification: Protocol documents

Publication_Information:

Publication_Place: Denver, CO

Publisher: USGS/BRD, Center for Biological Informatics

Other_Citation_Details:

Report prepared under contract by The Nature Conservancy, 1815 N.

Lynn Street, Arlington, Virginia 22209 and Environmental Systems

Research Institute, 380 New York Street, Redlands, California 92373

Online_Linkage: <http://biology.usgs.gov/npsveg/classification/index.html>

Type_of_Source_Media: Online

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 199411

Ending_Date: 2010

Source_Currentness_Reference: Publication Date and indefinitely

Source_Citation_Abbreviation: SNVCS protocol document

Source_Contribution:

This document describes and defines the vegetation classification system which is to be used for describing and mapping the vegetation at Jewel Cave National Monument

Source_Information:

Source_Citation:

Citation_Information:

Originator: USGSBRD, Center for Biological Informatics

Publication_Date: 19960405

Title:

Classification of the Vegetation of Jewel Cave National Monument

Geospatial_Data_Presentation_Form: report

Series_Information:

Series_Name: USGS-NPS Vegetation Mapping Program

Issue_Identification: Jewel Cave National Monument

Publication_Information:

Publication_Place: Denver, CO

Publisher: USGS/BRD, Center for Biological Informatics

Other_Citation_Details:

This report was generated by The Nature Conservancy under contract to the USGS/BRD, Center for Biological Informatics

Online_Linkage: <http://biology.usgs.gov/npsveg/jeca/methods.pdf>

Type_of_Source_Media: Online

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 199510

Source_Currentness_Reference: Ground Condition, 1995

Source_Citation_Abbreviation: JECA sample and classification

Source_Contribution: Report summarizing plot data collection effort

Source_Information:

Source_Citation:

Citation_Information:

Originator: Kenny Aerial Mapping Company, Phoenix, AZ

USGS-NPS Vegetation Mapping Program
Jewel Cave National Monument

Publication_Date: 19930817

Title:

Aerial photography (CIR and true color) of Jewel Cave National Monument

Geospatial_Data_Presentation_Form: photos

Publication_Information:

Publication_Place: Denver, CO

Publisher: USGS Center for Biological Informatics

Other_Citation_Details:

Aerial photography was taken at a scale of 1:16,000. Original media are in the form of positive transparencies. Photointerpretation was done on contact prints of the true color photos.

Online_Linkage: <http://biology.usgs.gov/npsveg/jeca/photos.html>

Source_Scale_Denominator: 12000

Type_of_Source_Media: Contact paper prints of film transparencies

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 19930817

Source_Currentness_Reference: Imagery date

Source_Citation_Abbreviation: jeca Aerial Photos

Source_Contribution:

These aerial photographs were the basis for the photointerpretation process

Source_Information:

Source_Citation:

Citation_Information:

Originator:

United States Dept. of the Interior, National Biological Survey (no USGS Biological Resources Division) and the National Park Service

Publication_Date: 199412

Title: Field Methods for Vegetation Mapping

Geospatial_Data_Presentation_Form: document

Publication_Information:

Publication_Place: Denver, CO

Publisher:

USGS/Biological Resources Division, Center for Biological Informatics

Other_Citation_Details:

This report was generated by The Nature Conservancy under contract to the USGS/BRD, CBI

Online_Linkage: <http://biology.usgs.gov/npsveg/fieldmethods/index.html>

Type_of_Source_Media: Online

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 199412

Ending_Date: 2010

Source_Currentness_Reference: Publication Date and indefinitely

Source_Citation_Abbreviation: field methods protocol document

Source_Contribution:

This document defines the methods and protocols for field data collection to be used as part of the USGS-NPS Vegetation Mapping Program.

Process_Step:

Process_Description:

The following describes the tasks performed by The Nature Conservancy to

USGS-NPS Vegetation Mapping Program
Jewel Cave National Monument

produce descriptive data for 29 vegetation sampling plots in two separate database files. Physical description - The first of the two contains general descriptive information at each of the plots. Plot sites were selected by information obtained during a reconnaissance visit to the park in April of 1995, and by examining tone and textural patterns on the JECA AERIAL PHOTOGRAPHS. Site physical parameters, species types, and vegetation strata were described at each site. The PLOT DATA database contains tabulations of site physical factors, listed under the ATTRIBUTE ACCURACY REPORT for each of the 29 plots. Plot data were manually recorded on field forms on-site, and subsequently keyed into the database files described herein. Information in the plot database was then used to develop the classification system and plant identification keys contained in the TNC JECA SAMPLING AND CLASSIFICATION REPORT. Species - The second contains listings of individual species found in each plot, along with cover estimates and height (strata) delineations. The SPECIES LISTING database contains line entries for each species including the Plot Code, and Plant Strata delineation. See 2.1.1 (Accuracy assessment Report) for explanations of these attributes. Plot data were manually recorded on field forms on-site, and subsequently keyed into the database files described herein. Information in the plot database was then used to develop the classification system and plant identification keys contained in the TNC JECA SAMPLING AND CLASSIFICATION.

Source_Used_Citation_Abbreviation: JECA Aerial Photos

Source_Used_Citation_Abbreviation: SNVCS protocol document

Source_Used_Citation_Abbreviation: Field Methods for Vegetation Mapping

Process_Date: 19960405

Source_Produced_Citation_Abbreviation: JECA sample and classification

Source_Produced_Citation_Abbreviation: JECA Veg Descriptions

Process_Contact:

Contact_Information:

Contact_Organization_Primary:

Contact_Organization: The Nature Conservancy

Contact_Person: Dennis Grossman

Contact_Position: Chief Ecologist, The Nature Conservancy

Contact_Address:

Address_Type: Physical Address

Address: 1815 Lynn Street

City: Arlington

State_or_Province: VA

Postal_Code: 22209

Country: USA

Contact_Voice_Telephone: (703) 841-5305

Contact_Electronic_Mail_Address: dgrossman@tnc.org

Spatial_Data_Organization_Information:

Indirect_Spatial_Reference:

Jewel Cave National Monument is in Custer County and is part of the south western Black Hills. The Monument lies 11 miles west of the town of Custer, South Dakota.

Direct_Spatial_Reference_Method: Point

Point_and_Vector_Object_Information:

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: Point

Spatial_Reference_Information:

Horizontal_Coordinate_System_Definition:

Planar:

USGS-NPS Vegetation Mapping Program
Jewel Cave National Monument

Grid_Coordinate_System:

Grid_Coordinate_System_Name: Universal Transverse Mercator

Universal_Transverse_Mercator:

UTM_Zone_Number: 13

Transverse_Mercator:

Longitude_of_Central_Meridian: -105

Latitude_of_Projection_Origin: 0

False_Easting: 500000

False_Northing: 0

Scale_Factor_at_Central_Meridian: .9996

Planar_Coordinate_Information:

Planar_Coordinate_Encoding_Method: Coordinate Pair

Coordinate_Representation:

Abscissa_Resolution: 1

Ordinate_Resolution: 1

Planar_Distance_Units: Meters

Geodetic_Model:

Ellipsoid_Name: Geodetic Reference System 80

Semi-major_Axis: 6378137

Denominator_of_Flattening_Ratio: 298.257

Entity_and_Attribute_Information:

Overview_Description:

Entity_and_Attribute_Overview:

Each of 29 vegetation mapping plot sites contains the attributes of species found. Physical description - General plot information is described by identification codes, locational information (including state, park name, and USGS 7 1/2' topographic quad name). Physical factors tabulated in the database include UTM_X, UTM_Y, UTM Zone, map projection, survey date, name of surveyors, plot length and width, type of photos used, plot elevation, slope aspect, topographic position, landform type, surface geology, Cowardin system descriptor, hydrology, rock size, surface material type, soil texture and drainage, leaf phenology, leaf type, and physiognomy. Species - (sp_code is a project specific code for each species found, species is the scientific name for that species, spcover is the species present and the percent cover for each species, plant code is the first two letters of the genus and first two letters of the species. If the code are not unique a number is added to make the code unique). This includes strata cover which is an average percent cover of that particular species, 1 = 0-10%, 2 = 10-25%, 3 = 25-60% and 4 = 60-100%, pstrata is the type of vegetation, T1 = emergent, T2 = canopy, T3 = sub-canopy, S1 = tall shrub, S2 = short shrub, H = herbaceous, N = non-vascular, V = vine/liana, and E = epiphyte.

Entity_and_Attribute_Detail_Citation:

Field Methods for Vegetation Mapping, December 1994, Prepared for: the United States Department of Interior, National Biological Survey (Now the USGS Biological Resources Division) and National Park Service. Prepared By: The Nature Conservancy, and Environmental Systems Research Institute. (<http://biology.usgs.gov/npsveg/fieldmethods/index.html>).

Distribution_Information:

Distributor:

Contact_Information:

Contact_Organization_Primary:

Contact_Organization: USGS-NPS Vegetation Mapping Program Coordinator

Contact_Address:

Address_Type: mailing and physical address

USGS-NPS Vegetation Mapping Program
Jewel Cave National Monument

Address: U.S. Geological Survey, Center for Biological Informatics, MS 302, Room 8000, Building 810,
Denver Federal Center

City: Denver

State_or_Province: Colorado

Postal_Code: 80225

Country: USA

Contact_Voice_Telephone: (303) 202-4220

Contact_Facsimile_Telephone: (303) 202-4219

Contact_Electronic_Mail_Address: gs-b-npsveg@usgs.gov

Resource_Description: JECA Plots data; Physical Descriptive Data and Species Listing Data.

Distribution_Liability:

Although these data have been processed successfully on a computer system at the Biological Resources Division, no warranty expressed or implied is made regarding the accuracy or utility of the data on any other system or for general or scientific purposes, nor shall the act of distribution constitute any such warranty. This disclaimer applies both to individual use of the data and aggregate use with other data. It is strongly recommended that these data are directly acquired from a Biological Resources Division server, and not indirectly through other sources which may have changed the data in some way. It is also strongly recommended that careful attention be paid to the contents of the metadata file associated with these data. The Biological Resources Division shall not be held liable for improper or incorrect use of the data described and/or contained herein.

Standard_Order_Process:

Digital_Form:

Digital_Transfer_Information:

Format_Name: HTML

Digital_Transfer_Option:

Online_Option:

Computer_Contact_Information:

Network_Address:

Network_Resource_Name: <http://biology.usgs.gov/npsveg/jeca/fielddata.html>

Fees: none

Metadata_Reference_Information:

Metadata_Date: 20011022

Metadata_Review_Date: 20050519

Metadata_Contact:

Contact_Information:

Contact_Organization_Primary:

Contact_Organization: USGS-NPS Vegetation Mapping Program Coordinator

Contact_Address:

Address_Type: mailing and physical address

Address:

U.S. Geological Survey, Center for Biological Informatics, MS 302,

Room 8000, Building 810, Denver Federal Center

City: Denver

State_or_Province: Colorado

Postal_Code: 80225

Country: USA

Contact_Voice_Telephone: (303) 202-4220

Contact_Facsimile_Telephone: (303) 202-4219

Contact_Electronic_Mail_Address: gs-b-npsveg@usgs.gov

Metadata_Standard_Name: FGDC-STD-001.1-1999 Content Standard for Digital Geospatial Metadata, 1998 Part 1: Biological Data Profile, 1999

Metadata_Standard_Version: FGDC-STD-001-1998

USGS-NPS Vegetation Mapping Program
Jewel Cave National Monument

Metadata_Extensions:

Online_Linkage: <http://biology.usgs.gov/fgdc.bio/bionwext.txt>

Profile_Name: Biological Data Profile FGDC-STD-001.1-1999